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Finanční analýza společnosti Boeing

Financial Analysis of the Boeing Company

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1. Introduction
2. Description of the financial analysis methodology
3. Characterization of Boeing company
4. Financial analysis of Boeing company
5. Conclusion

Bibliography
List of Abbreviations
Declaration of Utilization of Results from the Bachelor Thesis
List of Annexes
Annexes

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The declaration

"Herewith I declare that I elaborated the entire thesis, including all annexes, independently."

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content

1 Introduction

The financial analysis is an economic management activity, it uses the corporate financial statement and other information to analysis and assessment the company's operating capability. This thesis is a financial analysis for Boeing.

Boeing was once the world's largest civilian airlines, but in this day Boeing's market share is much less than before.

The aim to analysis of Boeing Company is to assess the financial performance of Boeing Company, based on the data from 2008-2012.By analyzing the financial position of the Boeing, the strengths and weakness can know, the ability of repaying debt, operating capacity and profitability will be seized. It's not difficult to predict the company's future trends of development and make some judgment to evaluate and find out the problem through analyzing the company's financial statement.

This thesis divided into three main parts, the first one is showing some methodology of financial analysis and explains them. It will be described for three methodologies: financial ratio analysis, Common size analysis and DuPont analysis.

The other part of this thesis is Boeing company description. Obviously this part is about the Boeing Company, the type, history, main business, structure and stock of Boeing.

Next part is financial analysis of Boeing; in this part the methodology which is described in part one will be used to analyze the financial situation of Boeing. Looking through the analysis we can imagine the development prospects of this company.

All results will be summarized at the end of the thesis.

2 Description of methodology of financial analysis

This chapter is to introduce some financial analysis method, and it's divided by three big parts, financial ratio analysis, DuPont analysis and Common size analysis. Some of them will be used in part 4 to analysis Boeing.

2.1 Financial ratio analysis

The financial ratio analysis is a way to evaluate the solvency, profitability and operational efficiency of a company.

A financial ratio is a relative magnitude of two selected numerical values taken from an enterprise's financial statements. Often used in accounting, there are many standard ratios used to try to evaluate the overall financial condition of a corporation or other organization. Financial ratios may be used by managers within a firm, by current and potential shareholders (owners) of a firm, and by a firm's creditors. Financial analysts use financial ratios to compare the strengths and weaknesses in various companies. [1].

Values used in calculating financial ratios are taken from the balance sheet, income statement, statement of cash flows or the statement of retained earnings. These comprise the firm's "accounting statements" or financial. The statements' data is based on the accounting method and accounting standards used by the organization.

When using financial ratio to analysis a company the ratios can be broadly classified into three basic categories: Liquidity Ratios, Profitability ratios and Activity ratios.

2.1.1 Liquidity Ratios

Liquidity ratios are ratios that come off the balance sheet and hence measure the liquidity of the company as on a particular day is the day that the balance sheet was prepared.[2]The

[1] http://en.wikipedia.org/wiki/Financial_ratios
[2] http://www.creditguru.com/ratios/ratiopg1.htm

liquidity ratio measures a company's ability to generate cash.

There are four liquidity ratios used for measure a company's liquidity. Current ratio, quick ratio, cash ratio, and operating cash flow ratio.

Current Ratios

$$\text{Current Ratios} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \qquad (2.1)$$

Current ratio is a way to measure the liquidity of a company but it's a short-term liquidity. The data of Current ratio calculated comes from balance sheet.

Quick Ratio

$$\text{Quick Ratio} = \frac{\text{Total Quick Assets}}{\text{Total Current Liabilities}} \qquad (2.2)$$

In this formula, the total quick assets are the sum of cash and cash equivalent, marketable securities and accounts receivable.

In normal circumstances if the quick ratio is too low, that means the risk of short-term debt is comparatively large; if the quick ratio is too low, it will increase the opportunity cost of business investment.

Cash ratio

The cash ratio is the ratio between cash and marketable securities and current liabilities.

$$\text{Cash ratio} = \frac{\text{Cash and Marketable Securities}}{\text{Current Liabilities}} \qquad (2.3)$$

Through this ratio we can know the liquidity of assets for a company. It reflecting the company's ability to pay the current debt without relies on sales and receivables.

Operating cash flow ratio

It is used to measure the current liabilities and cash flow generated from a company's operations

$$\text{Operating cash flow ratio} = \frac{\text{Cash flow fromoperation}}{\text{Current liabilities}} \qquad (2.4)$$

Compared with the other three, this ratio is not often used.

2.1.2 Profitability ratios

The profitability ratio is the ability that a company makes profit.And it's also the basis for enterprise's survival and development.

There are many ratios can indication the profitability of the business, but commonly we used operating profit margin, net profit margin, return on assets (ROA) and net rate of return on common stockholders 'equity (ROE).

Operating profit margin

From this ratio we can know how much money a company takes before interest and tax.

$$\text{Operating peofit margin} = \frac{\text{Operating income}}{\text{Total revenues}} \qquad (2.5)$$

Of course, the higher the ratio the better the company is.

Net profit margin

It can also call Net profit margin on sales. It's the percentage between the net profit and the revenue of sales.

$$\text{Net profit margin sales} = \frac{\text{Net Profit}}{\text{Sales Revenue}} \times 100\% \qquad (2.6)$$

Generally, the greater of this index means the stronger profitability of the enterprise sales. If a company is can keep a good sustainable growth in net profit margin sales, it's should be said that the financial position is good. But of course, the net profit margin sales are not the better.

Return on Assets (ROA)

Return on assets percentage shows how profitable a company's assets are in generating revenue.

$$\text{ROA} = \frac{\text{Net Income}}{\text{Average Total Assets}} \quad (2.7)$$

Sometimes this is referred to as "return on investment". The ratio measures the percentage of profits earned per dollar of Asset and thus is a measure of efficiency of the company in generating profits on its Assets.[3]

The higher ROA means the higher asset utilization. Typically, the rate of return on assets can compared with market interest rates, if the index is greater than the market interest rate, the company can use the financial leverage and Operation on Borrowings to get more earnings.

Return on equity (ROE)

$$\text{ROE} = \frac{\text{NI(AT)}}{\text{Shareholder Equity}} (2.8)$$

The NI means net income.ROE is an indicator to measure the earnings of a company; it's a rate of return for shareholders. However, the company's return on equity is high does not mean strong profitability. Some industries such as consulting firms do not need high asset so they usually have higher ROE. But for some high investment industries like steel mills, they have lower ROE. That is why ROE should be used to compare the same industry.

2.1.3 Activity ratios

Activity ratios are used to measure the relative efficiency of a firm based on its use of its assets, leverage or other such balance sheet items. These ratios can help us to evaluate the

[3] http://www.investopedia.com/terms/r/returnonassets.asp

benefits of some specific assets like accounts receivable.

Commonly there are three assessed activity ratios: the asset turnover ratio, the inventory turnover ratio and the receivables turnover ratio. The total asset turnover ratio is an important indicator to examine the operational efficiency of corporate assets.[4]

Total Asset turnover ratio

The asset turnover is financial ratios that can measures the efficiency of a company's use of its assets in generating sales revenue or sales income to the company. This index is usually defined as the ratio of sales income to average total assets.

$$\text{Assets Turnover} = \frac{\text{Net Sales Revenue}}{\text{Average Total Assets}} \qquad (2.9)$$

It is show the flow speed of assets from input to output of a business. By comparison and analysis of these indicators, we can found the gap of assent utilization between one business to another.

And there are two points we should notice when analysis the asset turnover:

- ✧ If the total asset turnovers of a business rise suddenly but the sale revenue has no much change. That do not means the business' asset utilization efficiency is improved. It's more likely that in this period of time the company scrapped a large number of fixed assets.
- ✧ If the total asset turnover is low and at a low state for long-term, the business should disposal of excess assets and

Increase sales to improve the total asset turnover.

Inventory turnover ratio

The inventory turnover ratio is the ratio of the enterprises the main business cost and average inventory balance.This ratio is used to reflect the liquidity for inventory.It not only can be used to measure the inventory's operational efficiency in the production and operation, but also used to evaluate the enterprise's operating results, and reflect the performance of the enterprise.

Knowing how much goods that have been sold cost, one can take that figure and divide it

[4] http://www.investopedia.com/terms/a/activityratio.asp

by the year's average inventory. The resulting figure will be the inventory turnover ratio.

$$\text{Inventory Turnover (times)} = \frac{\text{Sales Costs}}{\text{Average Inventory}} \qquad (2.10)$$

$$\text{Inventory Turnover (days)} = \frac{360}{\text{Inventroy Turnover(time)}} \qquad (2.11)$$

The higher the inventory turnover rate indicating that easier to let the inventories become cash and also means the cash flow become faster.

Working capital turnover

The working capital turnover rate indicates that the usage efficiency of a company's working capital. By analysis of working capital turnover we can foresee future financial difficulties caused by short-term cash flow and capitalization requirements.[5]

It reflects the times of turnover of working capital in one year.

$$\text{Working capital turnover} = \frac{\text{Total revenue}}{\text{Total woring captial}} \qquad (2.12)$$

Obviously, the shorter cycle, the better a company is.

Receivable turnover ratio

Receivable turnover ratio is the average number that accounts receivable converted to cash in a given period (usually one year).

$$\text{Receivables Turnover Ratio} = \frac{\text{Total tevenue}}{\text{Recevables}} \qquad (2.13)$$

The total revenue is from income statement in the financial statement, and the receivables can be finding in balance sheet.

$$\text{Number of days of receivables} = \frac{\text{Accouts receivables}}{\text{Average day's revenue}}$$

$$= \frac{365 \times \text{Accounts receivables}}{\text{Recenue}} \qquad (2.14)$$

That is the formula of "Number of days of receivables" it reflects how many days it takes that customer can pay their accounts to the company.

[5] http://yourbusiness.azcentral.com/high-working-capital-turnover-ratio-indicates-what-8609.html

Accounts receivable turnover ratio is sales revenue divided by the average accounts receivable. It shows the flow rate of the receivables.

In general, the faster the speed of receivables, the better benefit for a company. It indicates faster speed of receiving accounts, shorter collection period for a company. Obviously, that means that less bad debts losses, faster liquidity of assets and stronger ability to repay debt. And if the number of days of receivables is too long, the debtors owe accounts for a long time. At first it's risky, because it means that the possibility of bad debts becomes higher. The company cannot recover payments in time, it's not only harmful to the flow of funds, but also shows the company's efficiency is not high, and did not try them best to recover the money.

Number of days of payables

Number of days of payables is also a method of activity ratio analysis. It measures how long a company would take to pay its creditors on average.

$$\text{Number of days of payable} = \frac{\text{Accounts payable} \times 365}{\text{Purchases}}$$

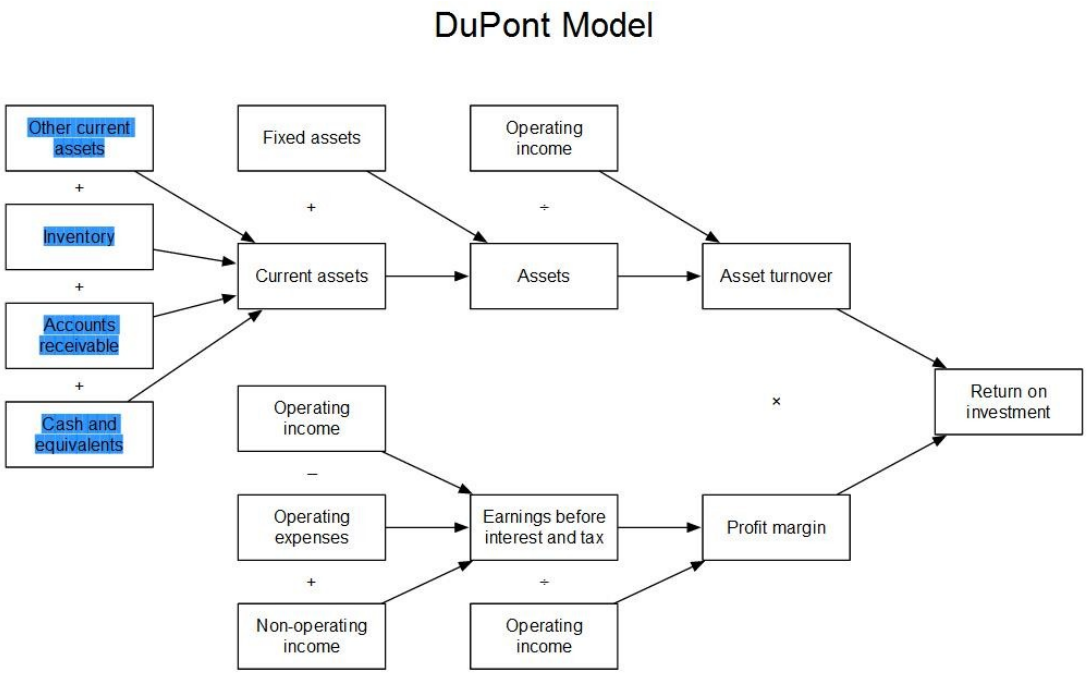
$$= \frac{\mathbf{Accountspayable \times 365}}{\mathbf{Costofgoodssole + endinginventory - buginninginventpry}} \qquad (2.15)$$

If the number of days of payables is higher, that means the company pays its creditor relatively slow even the company has difficulty to pay its creditors. It indicates the financial condition of this company is going to be worse. On the contrary, the number of days payable is lower; this company can easily pay its creditors and the financial condition is going to be better.

2.2Pyramidal decompositions

First of all, we need to understand the DuPont analysis. DuPont Analysis is a method of performance measurement by using some key financial ratios to analyze the financial position of the enterprise; this analysis method was first used by the DuPont Company, so called the DuPont analysis. It evaluates the enterprise performance from the financial point

of view. The basic idea is to break down the corporate ROE step by step, making it to become the product of a number of financial ratios. By the DuPont analysis ROE is broken down into three parts: Profit margin, total asset turnover and financial leverage.



[6]So we can know that the return on net assets affect by three types of factors.

$$\text{ROE} = \frac{\text{Net income}}{\text{Revenues}} \times \frac{\text{Revenues}}{\text{Total assets}} \times \frac{\text{Total assets}}{\text{Equity}} \qquad (2.16)$$

Net income / Revenues=net profit margin

Revenues / Total assets = assets turnover

Total assets / Equity = financial leverage

This formula can be expressed as follows:

$$\text{ROE} = \frac{\text{Operating income}}{\text{Revenues}} \times \frac{\text{Income before taxes}}{\text{Operating income}} \times \frac{\text{Revenues}}{\text{Assets}} \times \left(1 - \frac{\text{Taxes}}{\text{Income bufore taxes}}\right) \times \frac{\text{Total assets}}{\text{Total shareholders'equity}} \qquad (2.17)$$

Pyramidal decompositions

The basic ratio the basic ratio is ROE, the component ratio is net profit margin, total assets

[6]http://en.wikipedia.org/wiki/DuPont_analysis

turnover and financial leverage. And there are four methods for quantification of influence:

Methods of gradual changes,

Methods of decomposition with surplus,

Logarithmic decomposition method,

Functional decomposition method.

.

1. Method of gradual changes

- enables to quantify the change in the basic ratio caused by change in the component ratio

- In the case of decomposition with *3* - component ratios:

$$\Delta x_{a1} = \Delta a_1 \times a_{2.0} \times a_{3.0}$$

$$\Delta x_{a2} = a_{1.1} \times \Delta a_2 \times a_{3.0}$$

$$\Delta x_{a3} = a_{1.1} \times a_{2.1} \times \Delta a_3 \qquad (2.18)$$

Symbols:

x – basic ratio

Δx – absolute change in the basic ratio

a – component ratio

Δa – absolute change in the component ratio

2. Logarithmic decomposition method

-The advantage of that is we need just one formula for the impact quantification regardless of how many component ratios we have.

The impact of the i-th component ratio on the change in the basic ratio is calculated as follows:

$$\Delta x_{ai} = \frac{\ln I_{a1}}{\ln I_x} \times \Delta x \qquad (2.19)$$

$I_x = \frac{x_1}{x_0}$ Is the index of change in basic ratio

Δx Is the absolute change in basic ratio

$I_a = \frac{a_1}{a_0}$ Is the index of change in component ratio

2.3 Common size analysis

Common size analysis is a method of comparing either financial statements of different-sized companies or financial statements of one company from different time periods. It achieves these comparisons by measuring some part of a company's financial operations against the totality of the operations. The common-size analysis's aim is identify the trends and major differences.

There are two types of common size analysis: horizontal common-size analysis and Vertical common-size analysis.

2.3.1 Horizontal common-size

The basic elements of the horizontal analysis are comparing the data with the same type and different periods. There are two ways: Comparative Financial Statements and Index-number terries in horizontal analysis. Comparative analysis is a comparative analysis of the financial statements of listed companies in two years, in order to find out the individual projects different in each year. When you need to compare more than three years of financial statements we can use the Index-number terries: using one of year's data as the base year date, and the base date is defined as 100.Then conversion the other data to percentage, comparative analysis the size of the relative number.

2.3.2 Vertical analysis

Compared with the horizontal analysis the vertical analysis focusing on the key project comparison of different years, the vertical analysis to focus more on the analysis of the internal structure of the report. By using vertical analysis, we can clearly see that the ratio of change over time.

In these two methods the horizontal analysis focus on analysis the internal structure of financial statements and vertical analysis focus on the time variation of the financial

statements. Both of them are limited.

So only combine the horizontal analysis and vertical analysis can play the positive role of financial analysis.

3 Financial characterization of Boeing Company

This chapter is about Boeing company description with four parts: introduction and the history of Boeing, Boeing Company's main business, Boeing's main competitors and its stock. And in this chapter, most dates are from Boeing's official website.

3.1 Introduction of Boeing

Boeing isn't an unfamiliar for people who taken the plane. We travel by Boeing's aircraft. But not everyone knows that Boeing Company not only produces the Commercial Airplanes.

Boeing is the world's largest aerospace company and leading manufacturer of commercial jetliners and defense, space and security systems. A top U.S. exporter, the company supports airlines and U.S. and allied government customers in 150 countries. Boeing products and tailored services include commercial and military aircraft, satellites, weapons, electronic and defense systems, launch systems, advanced information and communication systems, and performance-based logistics and training.[7]

Boeing consists of four main business groups:

- Boeing Commercial Airplanes
- Boeing Integrated Defense Systems
- Boeing Capital
- Connexion by Boeing

And next section I will describe these in detail.

In 1903, two events launched the history of modern aviation. The Wright brothers made their first flight at Kitty Hawk, N.C., and 22-year-old William Boeing left Yale engineering college for the West Coast.

After making his fortune trading forest lands around Grays Harbor, Wash, Boeing moved to Seattle, Wash., in 1908 and, two years later, went to Los Angeles, Calif., for the first American air meet. Boeing tried to get a ride in one of the airplanes, but not one of the

[7] http://www.boeing.com/boeing/companyoffices/aboutus/brief.page

dozen aviators participating in the event would oblige. Boeing came back to Seattle disappointed, but determined to learn more about this new science of aviation.

For the next five years, Boeing's air travel was mostly theoretical, explored during conversations at Seattle's University Club with George Conrad Westervelt, a Navy engineer who had taken several aeronautics courses from the Massachusetts Institute of Technology.

The two checked out biplane construction and were passengers on an early Curtiss Airplane and Motor Co.-designed biplane that required the pilot and passenger to sit on the wing. Westervelt later wrote that he "could never find any definite answer as to why it held together." Both were convinced they could build a biplane better than any on the market.

In the autumn of 1915, Boeing returned to California to take flying lessons from another aviation pioneer, Glenn Martin. Before leaving, he asked Westervelt to start designing a new, more practical airplane. Construction of the twin-float seaplane began in Boeing's boathouse, and they named it the B & W, after their initials.[8]

3.2 Boeing Company's main business

In 1997, Boeing announced the completion of the merger: Boeing and McDonnell Douglas Corporation, the new Boeing Company started operation. After the merger with McDonnell Douglas, Boeing has become the world's largest companies of the aerospace field.

Mentioned in the last part, Boeing has four main businesses. The largest and most famous is the Boeing Commercial Airplanes. Production of civilian transport aircraft, the main products include: Boeing the 707,717,727,737,747,757,767,777,787 series of aircraft. For all models sold beginning with the Boeing 707 in 1957, Boeing's naming system for commercial airliners has taken the form of 7X7.

There are as many as tens of thousands aircraft from Boeing Commercial Airplanes active service in the world. Currently, Boeing Commercial Airplanes is the full development of the Boeing 787 and Boeing 747-8 series aircraft.

Boeing Defense, Space & Security is the other business group in Boeing Company. It

[8] http://www.boeing.com/boeing/history/narrative/n001intro.page?

formerly known as Boeing Integrated Defense Systems is a unit of The Boeing Company responsible for defense and aerospace products and services. Boeing Integrated Defense Systems was formed in 2002 by combining the former "Military Aircraft and Missile Systems" and "Space and Communications" divisions. Boeing Defense, Space & Security makes Boeing the second-largest defense contractor in the world and was responsible for 45% of the company's income in 2011.

The mainly production of Boeing Defense, Space & Security is military aircraft, missiles and launch vehicles. It's the largest contractor for the National Aeronautics and Space Administration.

The other bushiness group is Boeing Capital. Boeing Capital Corporation is a global provider of innovative financing solutions. Its primary mission is to support the other Boeing business units by arranging, structuring and/or providing financing to assist in the sale and delivery of Boeing products and services. A wholly owned subsidiary of The Boeing Company, Boeing Capital provides comprehensive customer financing support, primarily utilizing third-party financing, while aggressively managing risk and delivering strong financial performance.

The last business is Connexion by Boeing. Connexion by Boeing is relying on the Boeing Commercial Airplanes. Connexion by Boeing (CBB) was an in-flight online internet connectivity service from Boeing. This service allowed travelers to access a high-speed internet connection while on board a plane in flight through a wired Ethernet or a wireless 802.11 Wi-Fi connection. Connexion by Boeing was formed as a separate business unit of The Boeing Company. But on August 17, 2006, Boeing announced that it would discontinue its Connexion service, they said that "the market for this service has not materialized as had been expected."[9]

[9] http://en.wikipedia.org/wiki/Connexion_by_Boeing

3.3 Boeing's main rival

Boeing is the world's largest aircraft manufacturer. On any given day, in the air, the number of aircraft Boeing aircraft from other manufacturers combined. But the aircraft giant in the mid-1990s, almost bankrupt, they learned a lesson from the bitter experience of the brush with death; they had a new understanding of the theory of market share.

Boeing signs of decline began in early 1995; Boeing management was surprised to learn that its rival, Airbus had more the number of orders than Boeing at 1994.Boeing typically occupies around 70% of new aircraft orders, but at 1994 the number of orders it is less than 50%.

That took away the orders of Boeing is Airbus, Boeing’s biggest competitor now.

Airbus is an aircraft manufacturing subsidiary of EADS, a European aerospace company. Based in Blanca, France, a suburb of Toulouse, and with significant activity across Europe, the company produces approximately half of the world's jet airliners. Compared with Boeing, Airbus is a rising star in the field of civil aircraft, but rapidly growing, company turnover of more than 26 billion Euros in 2006, market delivery rose from 32% in 1999 to grow to 51% in 2007, with107 Block 525 four series models, covering all global aircraft market.

December 18, 1970 the Airbus Industries Company set up and carries out the trunk transport aircraft of the A300 series development, production, sales and after-sales service business. May 1974, the A300 airliner was officially put into use, but the following 10 years, Airbus is still in the start-up stage of the hardships, A300 and A310 twin-engine wide-body aircraft market sales more than 767, but the company products of the total sales volume is still not ideal, yet plagued by budget deficit. But in 1995, accounting for 30% of the international market sales target, the earning record was rewrite at that time. The Airbus has direct confrontation with Boeing.

At that time, somebody worry that Airbus has seized the throne form Boeing; the Boeing's employees are panic. Some Boeing’s managers came to Boeing With the merger of Boeing and McDonnell Douglas they are not willing to work for the second aircraft manufacturer. Boeing has 70% of the production capacity in the industry, many people worry that some

factories did not live dry, excess staff; the company's stock price will fall. In this unprecedented tense atmosphere, the Boeing commercial aircraft department head Ron Woodward decided to re-enact the Boeing aircraft production process. The next year, he did not want to lose to Airbus or Airbus claimed an aircraft sales. Boeing determined to keep the market share leader position; it was decided to direct confrontation with European competitors that fortune by subsidies. Almost overnight, the corporate strategy has completely changed.

Boeing began single-minded to pursuit of market share.

Before that Boeing ensure the production of a number of aircraft on the sell. Now, it started to think of mass production, it becomes that how many they possible to sell how many productions. Maintain market share has become the primary task of the Boeing.

In 2003, Airbus over Boeing for the first time in the delivery of the aircraft market share. The first time ever to become the undisputed world number one civil aircraft manufacturer. According to the Head of Airbus's vice president of market forecasts, Adam Brown, Airbus market share in 2003 was 55%, with sales of $ 29.5 billion; Boeing's market share is only 45%, sales of $ 13.5 billion.

But in 2006 with the introduction of the Boeing 787 Dreamliner and the Airbus A380 delay in delivery of a range of issues, Boeing becomes leading once again.

Now, Boeing and Airbus essentially bisects the civil aircraft market. And both of them realized the importance of expanding Asian market.

In September 2012, Boeing and Airbus focus on publishing the 2012-2031 global civil aviation market forecast, the two companies are very optimistic about the Asia-Pacific region, especially China's civil aviation market. Airbus Customer Services Chief Operating Officer said: "After 20 years, China will be more than the United States as a global air passenger turnover of domestic air passenger market."Boeing vice president of marketing also said: "expected in the next 20 years, China Airlines international business will be an average annual growth rate of 8.9% of rapid development."

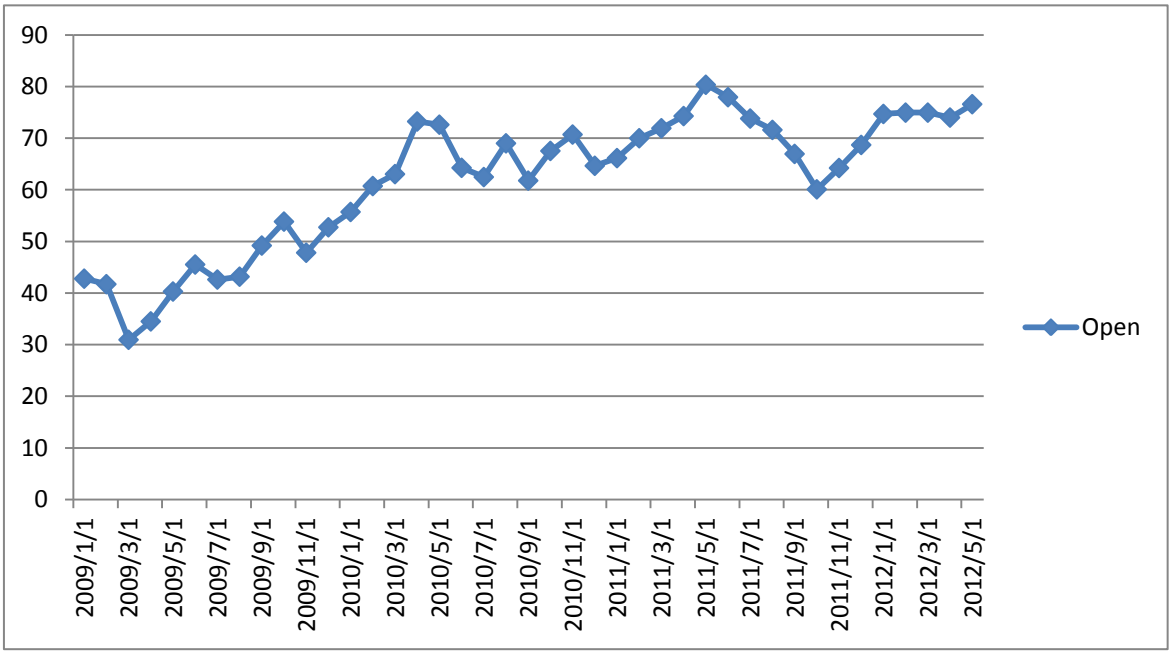
On the one hand, the Boeing aircraft market share in China of just over 50%, Airbus was about 46%, but Airbus said Airbus's market share in China will exceed 50% by the end of 2015.On the other hand, Boeing is also seeking new competitive strategy. They said: "Our

competitor’s goal is to get the aircraft lower prices, and our goal is to make the aircraft better”. In addition, Boeing has cargo aircraft sales as an important strategic. Boeing predicts that the scale of Chinese cargo plane will triple in the next 20 years, the new demands of the Chinese cargo plane is about 350.

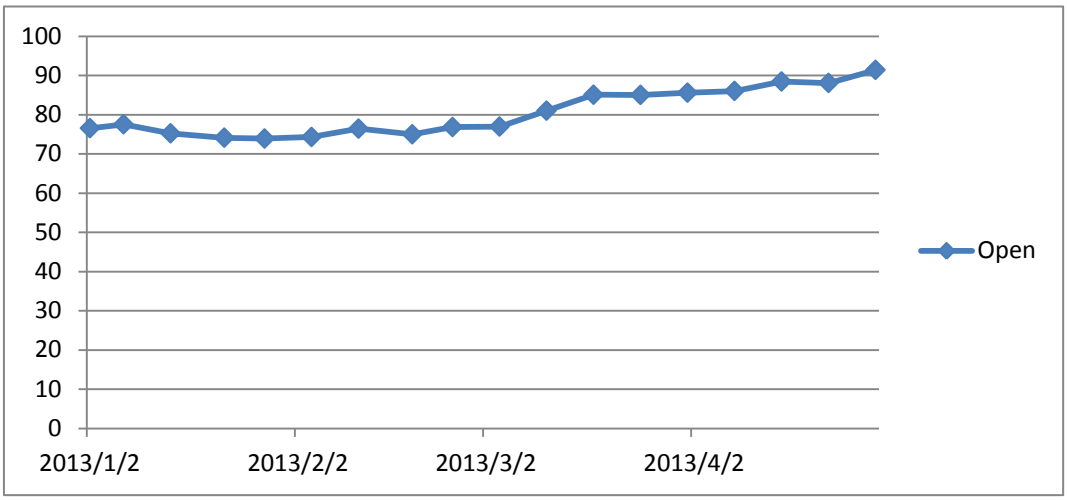
In 2011, however, Airbus and Boeing announced that they two companies nearly complete monopoly in the market for large commercial aircraft has ended. Brazil, China, Canada and Russia have plans in the next five years to develop its own models into the more than one hundred airport.This obviously means greater challenges for Boeing.

3.4 Boeing's stock

Graph 3.1 Boeing's stock price from 2009-2012



This is Boeing's stock price from 2009-2012.From which we can see that, although there are fluctuations, but Boeing's stock price is still showing upward trend.Although Boeing's market and increasing competitive pressure, but as a experienced airlines, Boeing still has a good foundation to continue to develop



Graph 3.1 Boeing's stock price from 2013

Here are stock price changes from January to April 2013.This time, Boeing has two major things. January 16, Boeing 787 consecutive failure, the U.S. Federal Aviation Administration ordered to temporarily stop using all Boeing 787 aircraft in the United States. Suspending the use of the Boeing Company's flagship product, give Boeing a big blow. Boeing's share price on the NYSE on the 16th day plunged 3.4%, to close at $ 74.34.And the other important event is in March 26.Boeing Tuesday shares risen 2.2%, at $ 86.83.This is because the company has been successfully completed the test flight on Monday of the 787 Dream liner. As an airline, the release of new aircraft and product quality has a huge impact on the share price of a company.

3.5Boeing's Major Events 2008 to 2012

- **March 27 2008:** The first 777 Freighter, Boeing's newest cargo jet, enters a moving assembly line. The freighter is the first derivative to test the new 777 production system.
- Aug. 9 2008**:** Boeing begins major assembly on the first 747-8 Freighter.
- Dec. 15 2008**:** The U.S. Air Force Research Laboratory selects an industry team led by Phantom Works to develop the technology for that enables unmanned aerial vehicles to refuel from tanker aircraft.
- Feb. 27 2009: Boeing, through its Space Exploration division, submits a proposal to

NASA for Altair lunar Lander design support.

- Nov. 20 2009: Boeing holds a groundbreaking ceremony to mark the start of construction for the second final assembly site for the 787 Dreamliner program at its Boeing Charleston facility.
- Dec. 22**:** Boeing announces the acquisition of Alexia North America's interest in Global Aeronautical of North Charleston, S.C., making Boeing the sole owner of the entity. On the same day the second 787 makes its first flight.[10]

[10] http://www.boeing.com/boeing/history/chronology/chron20.page?

4 Financial analysis of Boeing

There are 3parts in this chapter, including ratios analysis, the DuPont analysis and Common size analysis. We analyze the financial statements of Boeing from 2008 to 2012.

All the data I use in this chapter are from the annual reports of Boeing, which is available in Annexes.

4.1 Ratios analysis

Including profitability ratios analyze, liquidity ratios analyze and activity ratios analyze.

4.1.1 Profitability ratios

Here are the profitability ratios of Boeing from 2008 to 2012.

Table 4.1 profitability ratios of Boeing (Millions).

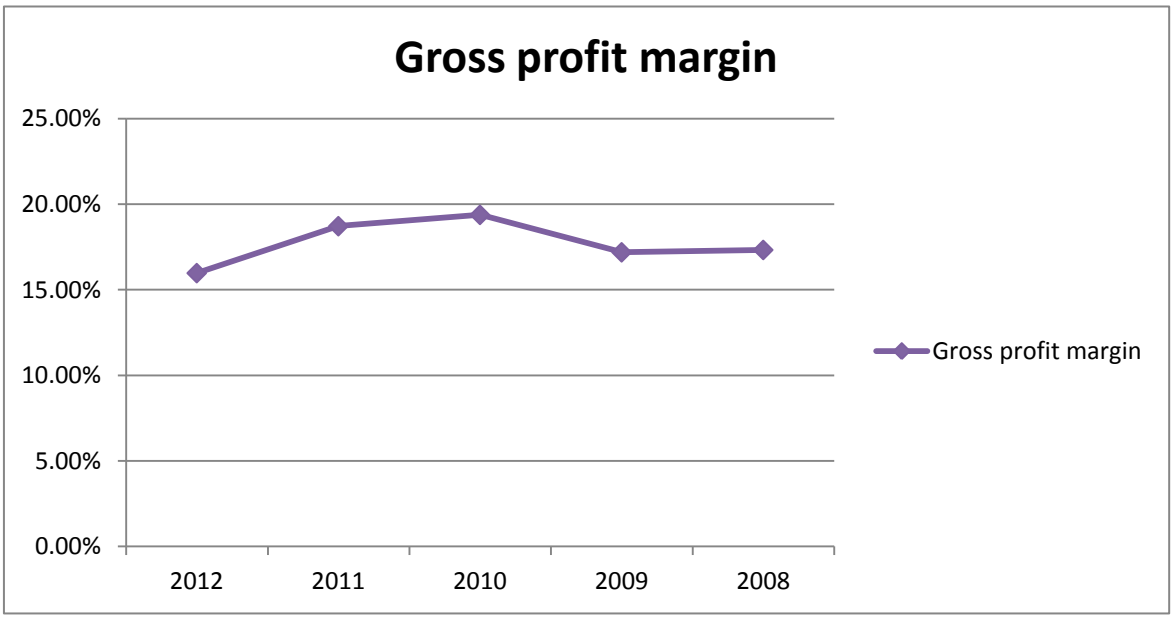
Profitability ratios	2012	2011	2010	2009	2008
Revenues	81698	68735	64306	68281	60909
Operating Profit(EBIT)	5910	5393	4507	1731	3995
Net Profit(EAT)	3903	4011	3311	1335	2654
Total asset	88896	78986	68565	62053	53779
Equity	5867	3515	2766	2128	-1294
Operating Profit margin	7.23%	7.85%	7.01%	2.54%	6.56%
Net Profit margin	4.78%	5.84%	5.15%	1.96%	4.36%

ROA	4.39%	5.08%	4.83%	2.15%	4.94%
ROE	66.52%	114.11%	119.70%	62.73%	-205.10%

Table 4.2Gross profit margin of Boeing

	2012	2011	2010	2009	2008
Cost of revenue,	68644	55867	51843	56540	50352
Revenue	81698	68735	64306	68281	60909
Gross profit margin	15.98%	18.72%	19.38%	17.20%	17.33%

Chart 4.1



Gross profit margin ratio is the initial basis for net profit margin. Form this chart; we can see from 2008 to 2012,Boeing's gross margins are less than 20%. In 2008-2010, the gross profit margin is in the growing trend reached its highest point in 2010.But this trend can't keep. Boeing's gross profit margin continued to decline in 2010-2012, at the end of 2012, the gross profit ratio is less than five years ago.

But this does not necessarily mean Boeing's retrogression. In 2012, Boeing has 1203 aircraft Net orders and it's the second highest number of annual orders in the company's history.

But why the gross profit margin in this year was reduced? This is because the in 2012, Boeing Company has a large number of research and innovation R & D costs have a greater impact on gross margin.

On the other hand, Boeing's main products are large passenger aircraft. Rising prices of raw

materials like steel and petroleum is also one of the reasons for decline in gross margin.

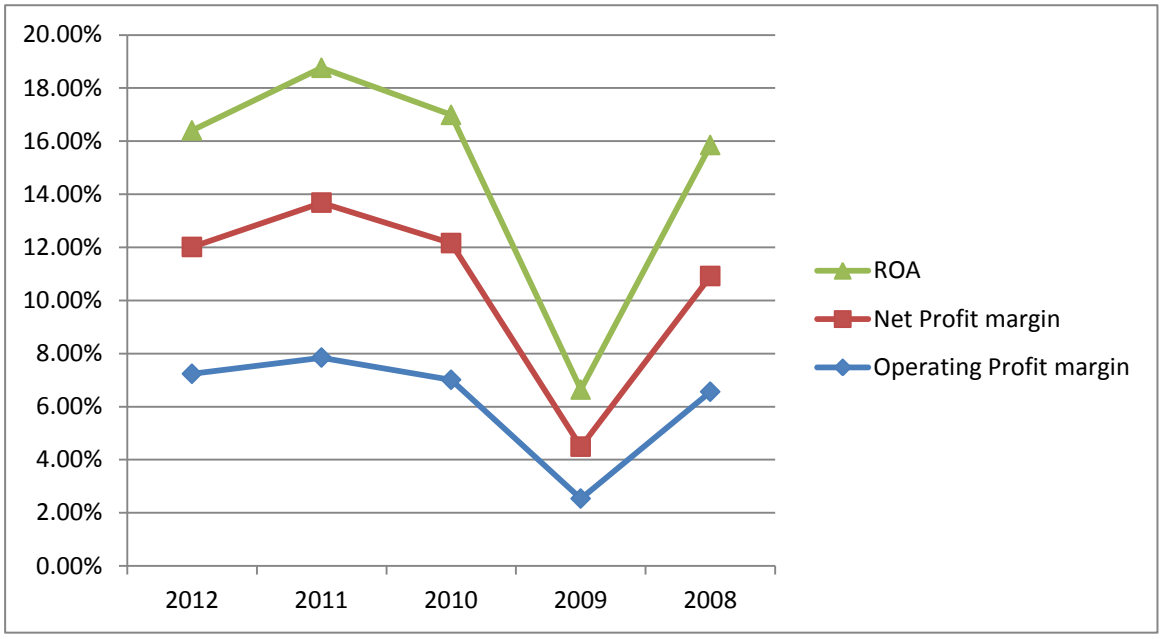


Chart 4.2 Profitability ratios of Boeing

Look the charts (table 4.1, graph 4.1) from 2008 to 2012, net profit margin, return on assets and operating profit margin all had big change, especially in 2009.This is because of the economic crisis of 2008 caused a huge blow to Boeing. And after that, we can see that all of the three ratios are growth.

But in graph 4.1, one ratio does not appear. It's ROE. That because during these years the ROE is very strange. It not only changes very fast, and beyond the normal scope. From 2009 to 2012 the ROE continued growth even more than one hundred percent and in 2008 ROE of Boeing is a negative number.

ROE is a ratio for EAT and equity and ROA is the ratio for EAT and assets. Form the ROA, we can know that the EAT of Boeing is normally, the key reason is equity.

Assets equal liabilities coupled owner's equity. However by the Table 4.1, there is very small value of owners' equity. It's also means that during these years, specifically 2008.Boeing's liabilities are a very large number.

Therefore, contact the financial crisis that began in 2008, the negative number of ROE doesn't suggest deficit. It's because the capital is negative at the beginning of this year.

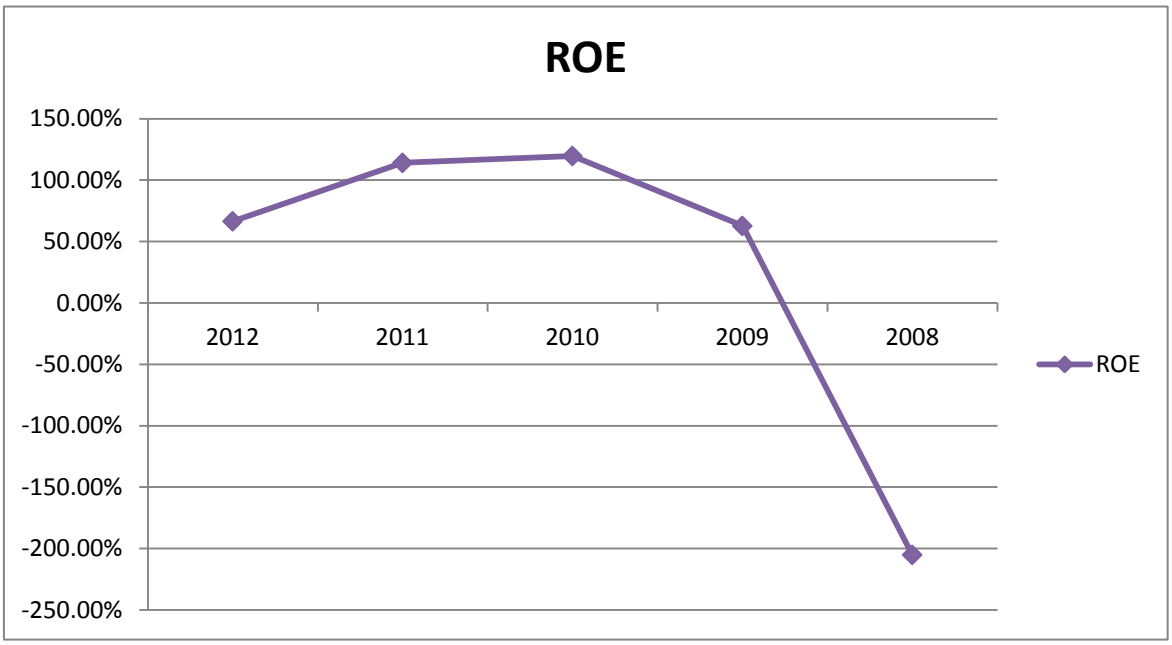


Chart 4.3 ROE of Boeing

ROE back positive number in 2009, and in 2010 and 2011, it more than one hundred percent. This shows that Boeing is recovering from the financial crisis. And in 2012 ROE began to return to normal.

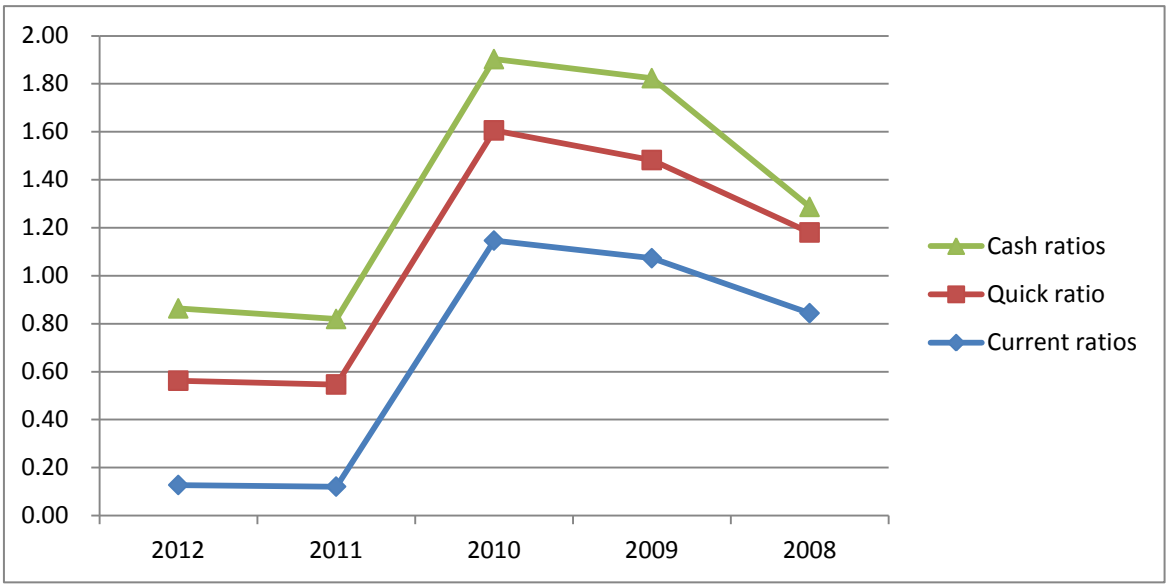
4.1.2 Liquidity ratios analysis

Table 4.3 Liquidity ratios of Boeing

Liquidity ratios	2012	2011	2010	2009	2008
Net Receivables	6000000	6298000	5738000	2235900	7073000
Short Term Investments	3217000	1223000	5158000	2008000	11000
Short term debt	44982000	41274000	35395000	32883000	30773000
Cashand Cash Equivalents	10341000	10049000	5359000	9215000	3268000
Current assets	5730900	4981000	40572000	35275000	25964000
Current liabilities	44982000	41274000	35395000	32883000	30773000

Current ratios	12.74%	12.07%	114.63%	107.27%	84.37%
Quick ratio	43.48%	42.57%	45.92%	40.93%	33.64%
Cash ratios	30.14%	27.31%	29.71%	34.13%	10.66%

Chart 4.4 Liquidity ratios of Boeing



On the whole, the change trend of these three ratios is the same. Continued to rise from 2008 to 2010, 2010-2011 dropped significantly and a little rise in 2012.

The higher current ratio, the greater liquidity of assets for the enterprise. And the standard value of current ratio is 2.However, among these five years, Boeing's current ratio is less than 2.So we can say that the Boeing has low ability to pay back the current liabilities. But this is just for one-side. When measure the corporate solvency of short term liability, the quick ratio also needs to be used. The quick ratio usually should be kept at 1.From 2008 to 2010 the quick ratio is Comply with the standard. But in 2011-2012, these ratios dropped to less than one.

Combination of the two ratios, we can see that in the years 2008-2010, Boeing's short-term solvency is relative strength. And in 2011, there is a rapid growth in short term liabilities. Accordingly, there is a decline in Boeing solvency. The good news is that Boeing's current assets are also increasing rapidly in 2010-2012.That because Boeing harvested a total of 805 civil aircraft net orders in 2011, it’s the best level in the company. Also because of this, in 2012, the Boeing’s various indexes are rebounded.

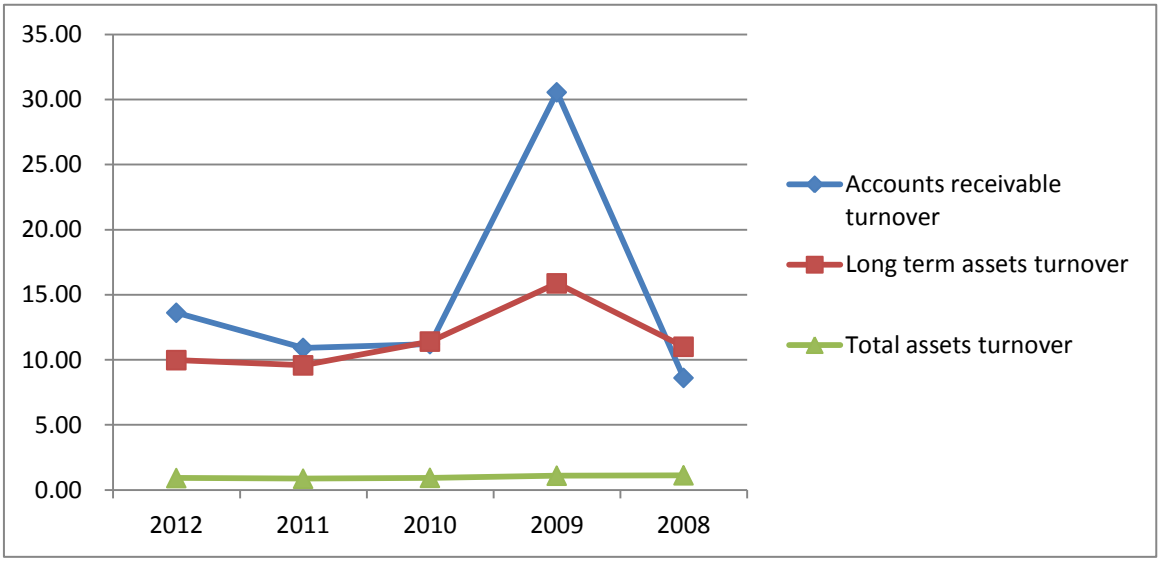
4.1.3 Activity ratios analysis

In this part we will analysis activity ratios.

Time	2012	2011	2010	2009	2008
Revenue	81698	68735	64306	68281	60909
Total Assets	88896	78986	68565	62053	53779
long term assets, total	8189	7179	5640	4302	5536
Net Receivables	6000	6298	5738	2235	7073
Accounts receivable turnover	13.62	10.91	11.21	30.55	8.61
Long term assets turnover	9.98	9.57	11.40	15.87	11.00
Total assets turnover	0.92	0.87	0.94	1.10	1.13

Table4.4 Activity ratios of Boeing

Chart 4.5 Activity ratios of Boeing



By the graph 4.4, the total assets turnover of Boeing is very low. The low-profit margin companies often have high asset turnover, high profit margins of the company's asset

turnover is usually low. This shows that although Boeing encountered all kinds of pressure in recent years, but essentially, it is a very profitable company.

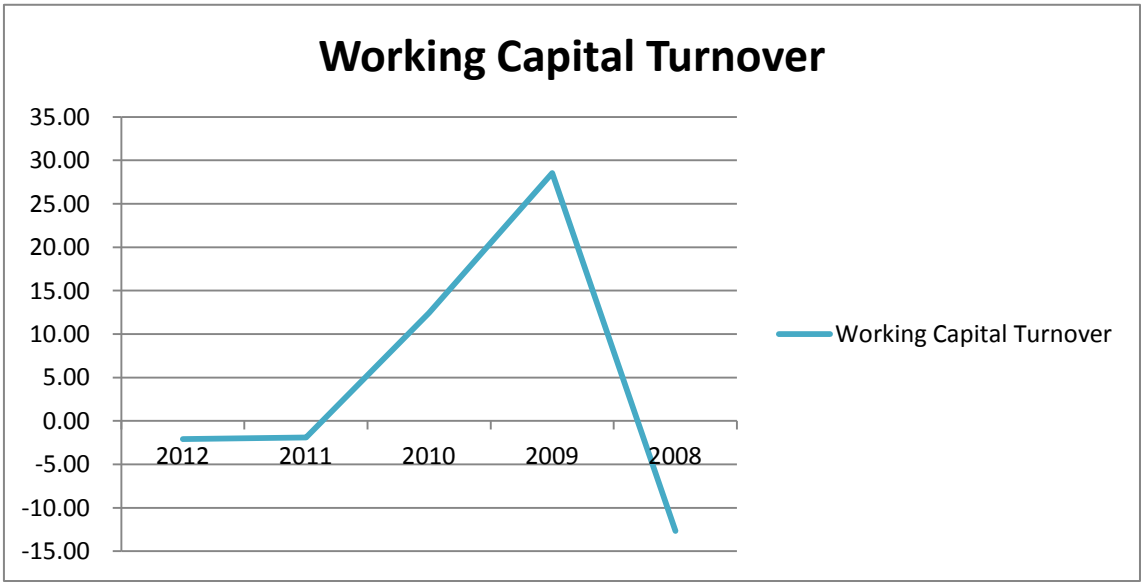
Long term assets turnover can also called fixed assets turnover. The number of long-term assets turnover is more, the shorter the turnover days is. Boeing is an airline company so the fixed costs are higher than other industries. This leads to the fixed asset turnover of the industry are lower than other industries. Boeing's fixed asset turnover keeps a relatively stable state in addition to a little rise in 2009.

Accounts receivable turnover ratio is rose to the highest in the same year. Under normal circumstances, the accounts receivable turnover ratio as high as possible.

Table 4.5Working Capital Turnover

	2012	2011	2010	2009	2008
Total revenue	81698	68735	64306	68281	60909
Total Current Assets	5731	4981	40572	35275	25964
Total Current Liabilities	44982	41274	35395	32883	30773
Working Capital	-39251	-36293	5177	2392	-4809
Working Capital Turnover	-2.08	-1.89	12.42	28.55	-12.67

Chart 4.6Working Capital Turnover



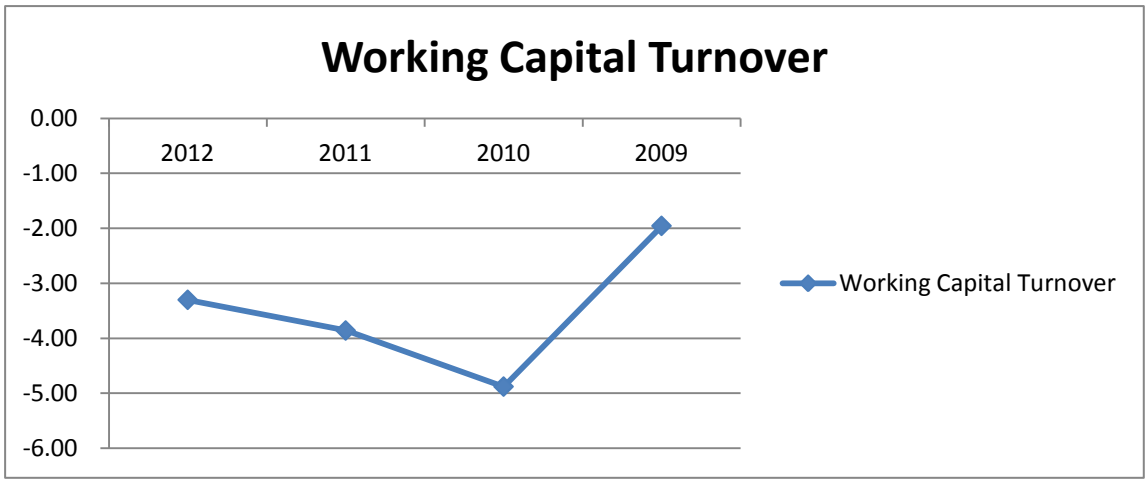
By observing the table 4.5 and graph 4.5, we can see that in some years, like 2008, 2011 and 2012. Boeing's working capital turnover is negative. It is usually a bad sign for industries for having a negative working capital turnover.

The higher your working capital turnover ratio is, the more efficient you are in using working capital to generate sales. But it needs to compare with companies in the same industry.

Table 4.6Working Capital Turnover form China Southern Airlines

	2012	2011	2010	2009
Total revenue	101,483	92,707	77,788	56,043
Total Current Assets	16,787	19,485	15,859	9,128
Total Current Liabilities	47,530	43,506	31,801	37,782
Working Capital	-30,743	-24,021	-15,942	-28,654
Working Capital Turnover	-3.30	-3.86	-4.88	-1.96

Chart 4.7Working Capital Turnover form China Southern Airlines



China Southern Airlines is a Chinese airline; its profit has been in a relatively stable state. Through the table 4.5 and graph 4.6 the working capital turnover's change in China Southern Airlines is negative one to negative 5.But Boeing's maximum has reached the 28.

By comparing the two airlines, we can find that the Boeing's working capital turnover is too high, especially in 2009.

The high working capital turnover means the companies can use their funds more efficiently. But a very high working capital turnover ratio can show that a company does not have enough capital to support its sales growth.

This is normal for Boeing at that time. Because in 2009, global economic conditions are poor, Boeing's short-term investments are decreased. This directly led to the decrease in

Boeing’s working capital and the working capital turnover become higher.

Table 4.7

	2012	2011	2010	2009	2008
Accounts payable	43546	38921	34447	32176	30213
Cost of revenue	68644	55867	51843	56540	50352
Inventories	37751	32240	24317	1693	15612

According to this table, we can calculate the number of days of payables from 2008 to 2012.

Table 4.8 number of days of payables

	2012	2011	2010	2009	2008
Number of days of payables	149.39	161.24	165.09	201.68	167.18

Usually number of days of payables as long as possible, this means that companies can use the supplier loans to supplement working capital. Boeing’s number of days is longer than other company in the same industry. This shows that Boeing's market position is strong, and has a good reputation, so you them can have the initiative on the occupancy of payment.

4.2 DuPont Analysis

In this part the data from 2011 to 2012 will be analyzed by the DuPont analysis.

Table 4.9DuPont Analysis

	2012	2011	2010	2009	2008
Net income	3900	4018	3307	1312	2672
Revenues	81698	68735	64306	68281	60909
Net Profit margin	4.78%	5.84%	5.15%	1.96%	4.36%
Total assets	88896	78986	68565	62053	53779
Total assets turnover	0.92	0.87	0.94	1.10	1.13

Equity	5867	3515	2766	2128	-1294
ROE	66.52%	114.11%	119.70%	62.73%	-205.10%

If using the return on net assets and the profit margin are the profitability indicators of a company. We can see that the profitability of Boeing has been in a state of growth, although in 2008 and 2009, this growth slowed. In table 4.4, the return on equity of Boeing Company was increasing at a certain degree from 2008 to 2010, going from -205.10% to 119.70%, it indicated that the business owners invested capital can get high profitability and high efficiency of financial and management activities. However, from 2011 to 2012, it dropped; although due to the characteristics of the industry, ROE remains at a high state. But the company also should strengthen the management of capital investment to get high profit for business owners.

Boeing's revenue has been greatly improved in the past five years, but not for the net income. Although it improved from 2672 to3900, but considering the big changes in income the net income growth is too slow. This can only be because when the revenue was increase the cost had a big increase at same time. Control costs have been enormous problems of the airline.

So for Boeing, one of the ways to increase net income is to reduce production costs and improve production efficiency.

Influence quantification

Table 4.10

	A2012	A2011	Δa
a1=EAT/Rev	0.05	0.06	0.01
a2=Rev/Assets	0.92	0.87	-0.05
a3=Assets/Equity	15.15	22.47	7.32

Through those two tables we can calculate the ΔROE from each ratio.

Net profit margin on the influence of the ROE:

$$0.01 \times 0.92 \times 15.15 = 0.139 = 13.9\%$$

Total assets turnover on the influence of the ROE:

$$0.06 \times -0.05 \times 15.15 = -0.045 = -4.5\%$$

Equity Multiplier on the influence of the ROE:

$$0.06 \times 0.87 \times 7.32 = 0.382 = 38.2\%$$

By this method, we can calculate the ROE rate of change for every year.

Table 4.11

	a2008	a2009	∆ a	∆ Xai
a1=EAT/Rev	0.04	0.02	-0.02	1.16
a2=Rev/Assets	1.13	1.10	-0.03	0.03
a3=Assets/Equity	-41.56	29.16	70.72	1.50
SUM				2.68

In this table from 2008 to 2009, net profit margin decreased by 0.02, total assets turnover decreased by 0.03, only the financial leverage increased by 70.72.

All of them had positive influence on ROE. The financial leverage had a biggest effect on ROE, It changes too fast. Because at the beginning of the 2008, the equity for Boeing is a negative number.

Table 4.12

	a2009	a2010	∆ a	∆ Xai
a1=EAT/Rev	0.02	0.05	0.03	1.17
a2=Rev/Assets	1.13	0.94	-0.19	-0.32
a3=Assets/Equity	32.09	24.79	-7.30	-0.35
SUM				0.50

It can easily be seen, net profit margin has the most important role for ROE. Only the net profit margin increased by 0.03.It contributing 1.17 in total 0.50 annual ROE change. Total assets turnover is the second influential factor which contributed-0.32 in ROE changes. Financial leverage contributed -0.35% in ROE change as a least influential factor.

Table 4.13

	a2010	a2011	∆ a	∆ Xai
a1=EAT/Rev	0.05	0.06	0.01	0.16
a2=Rev/Assets	0.94	1.10	0.16	0.24
a3=Assets/Equity	24.79	22.47	-2.32	-0.15
SUM				0.25

Two increased and one decreased from 2010 to 2011.The decreased one is financial leverage.

But it does not have a huge impact on ROE. Total assets turnover had a biggest effect on ROE, contributing 0.24 in total 0.25 annual ROE change.

4.3 Common-Size analysis

There are two kinds of common size analysis which will be used in this part, vertical common size analysis and horizontal common size analysis.

4.3.1 Vertical Common-Size Analysis

Table 4.14 Vertical common size analysis of income statement (% of revenues)

	2012	2011	2010	2009	2008
Revenue	100	100	100	100	100
Cost of revenue, total	84.02%	81.28 %	80.62%	82.80 %	82.67 %
Gross profit	15.98%	18.72 %	19.38%	17.20 %	17.33 %
Selling/General/Administrative Expenses, Total	4.55%	4.96%	5.67%	4.93%	5.06%
Operating Income	7.72%	8.50%	7.73%	3.07%	6.49%

Income After tax	4.78%	5.84%	5.15%	1.96%	4.36%
Net income	4.77%	5.85%	5.14%	1.92%	4.39%

From chart 4.9, the Cost of revenue has large proportions, buy it just has change in the five years .That means that fixed costs accounted for a large range in Boeing Company's cost.

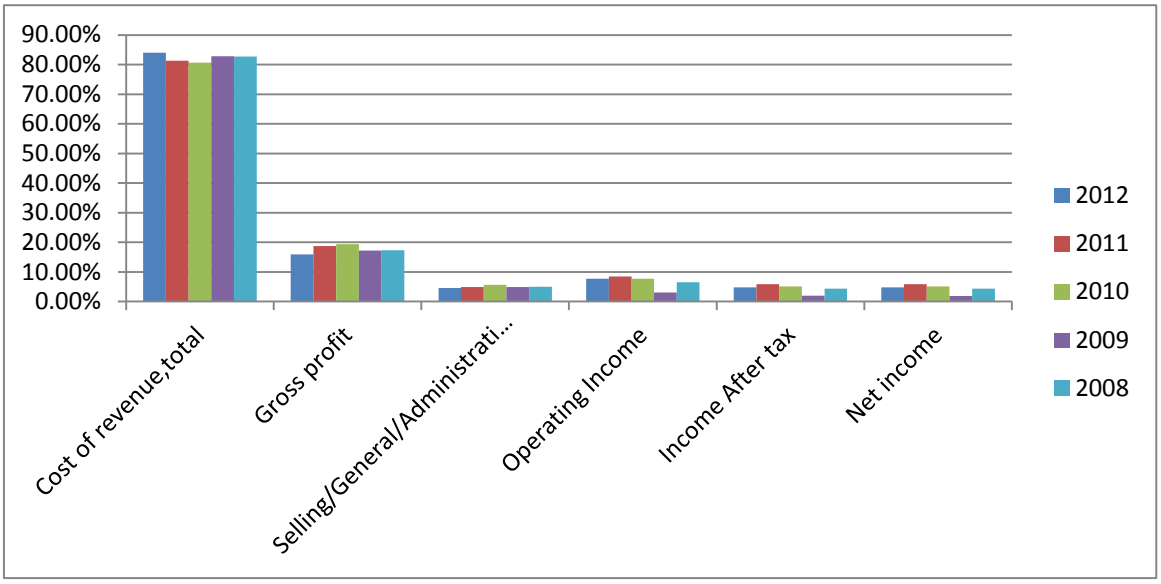


Chart 4.8Vertical common size analysis of income statement (% of revenues)

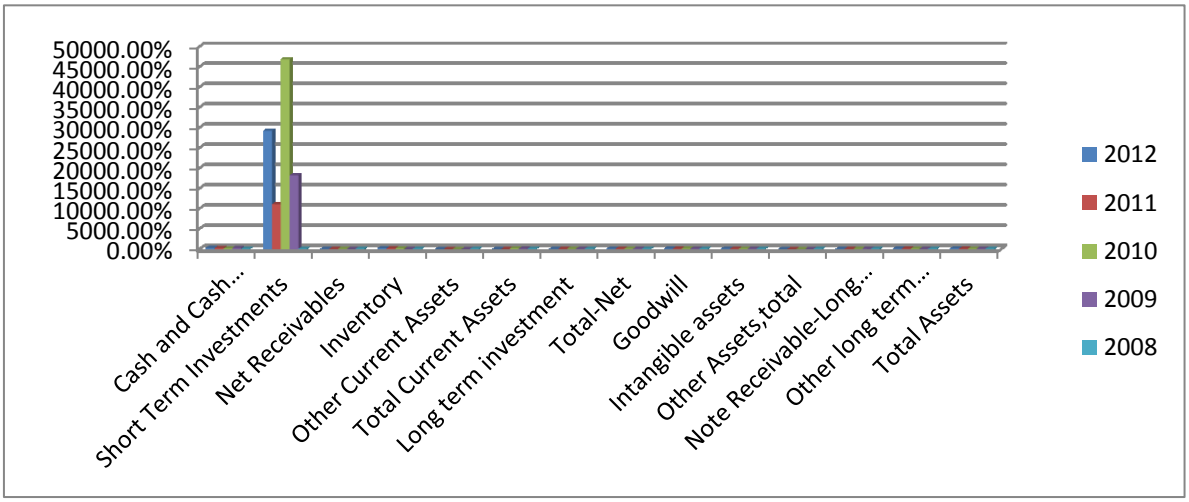
This is also an important issue for the aviation industry. The cost is too high for development and production of aircraft, but if they do not develop new products, the company will be lack of market competitiveness.

Table 4.15 Common-size balance sheet (% of total assets)

	2012	2011	2010	2009	2008
Cash and Cash Equivalents	11.63%	12.72%	7.82%	14.85%	6.08%
Short Term Investments	3.62%	1.55%	7.52%	3.24%	0.02%
Net Receivables	6.75%	7.97%	8.37%	3.60%	13.15%
Inventory	42.47%	40.82%	35.47%	2.73%	29.03%

Other Current Assets	0.00%	0.00%	0.00%	0.00%	0.00%
Total Current Assets	6.45%	6.31%	59.17%	56.85%	48.28%
Long term investment	1.33%	1.32%	1.62%	1.66%	2.47%
Total-Net	10.87%	11.79%	13.03%	14.16%	16.29%
Goodwill	5.66%	6.26%	7.20%	6.96%	6.78%
Intangible assets	3.50%	3.85%	4.34%	4.64%	4.99%
Other Assets, total	0.00%	0.00%	0.00%	0.00%	0.00%
Note Receivable-Long term	4.96%	5.89%	6.41%	8.81%	10.89%
Other long term assets, total	9.21%	9.09%	8.23%	6.93%	10.29%
Total Assets	100%	100%	100%	100%	100%

Chart 4.9Common-size balance sheet (% of total assets)



By these two charts, I can be found that in Boeing Company inventory plays a very important role in the total assets. And the Cash and Cash Equivalents was less than inventory.

Boeing sales large - sized commodities Aerospace equipment, it's the large - sized commodities, which is obviously much more difficult than selling an apple.

4.3.2 Horizontal common size analysis

The main different between Vertical Common-Size Analysis and Horizontal common size analysis is in Horizontal common size analysis it choose one year as a base year which equals to 100%, the other years will be compared with the percentage of this base year.

Table 4.16 Common size balance sheet (2008 as base year)

	2012	2011	2010	2009	2008
Cash and Cash Equivalents	316.43%	307.50%	163.98%	281.98%	100%
Short Term Investments	29245.45%	11118.18%	46890.91%	18254.55%	100%
Net Receivables	84.83%	89.04%	81.13%	31.61%	100%
Inventory	241.81%	206.51%	155.76%	10.84%	100%
Other Current Assets	0.00%	0.00%	0.00%	0.00%	100%
Total Current Assets	22.07%	19.18%	156.26%	135.86%	100%
Long term investment	88.86%	78.54%	83.66%	77.56%	100%
Total-Net	110.25%	106.29%	101.93%	100.25%	100%
Goodwill	138.06%	135.59%	135.37%	118.43%	100%
Intangible assets	115.87%	113.37%	110.95%	107.15%	100%
Other Assets, total	0.00%	0.00%	0.00%	0.00%	100%
Note Receivable-Long term	75.33%	79.43%	75.04%	93.32%	100%

Other long term Assets, total	147.92%	129.68%	101.88%	77.71%	100%

As the base year, 2008 had a bad start. We all know that 2008 is the year of the financial crisis began. So in that year, all the dates are very low, specifically the short term investments.

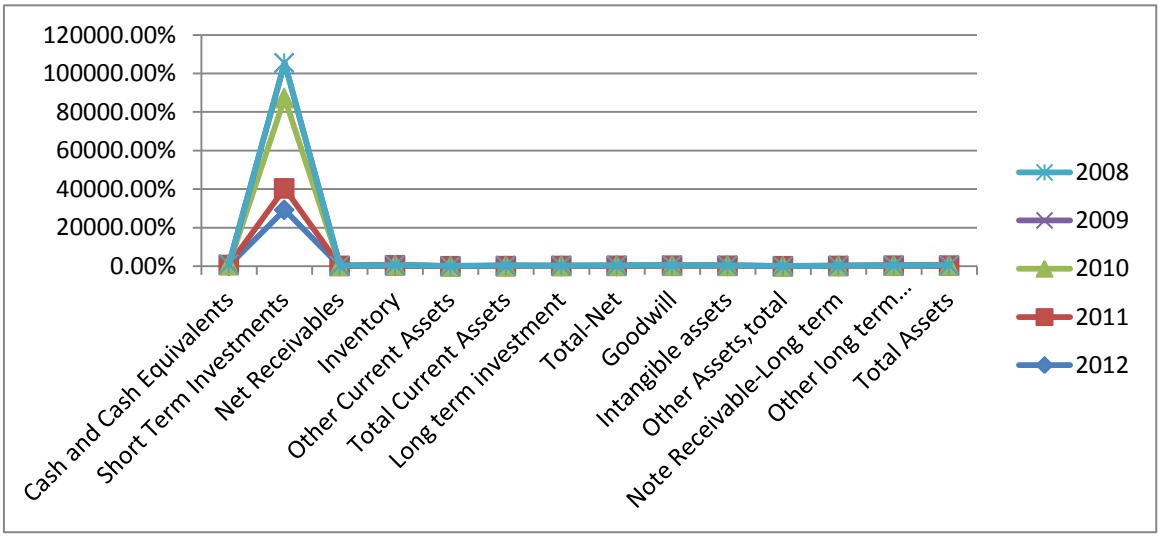


Chart 4.10Common size balance sheet (2008 as base year)

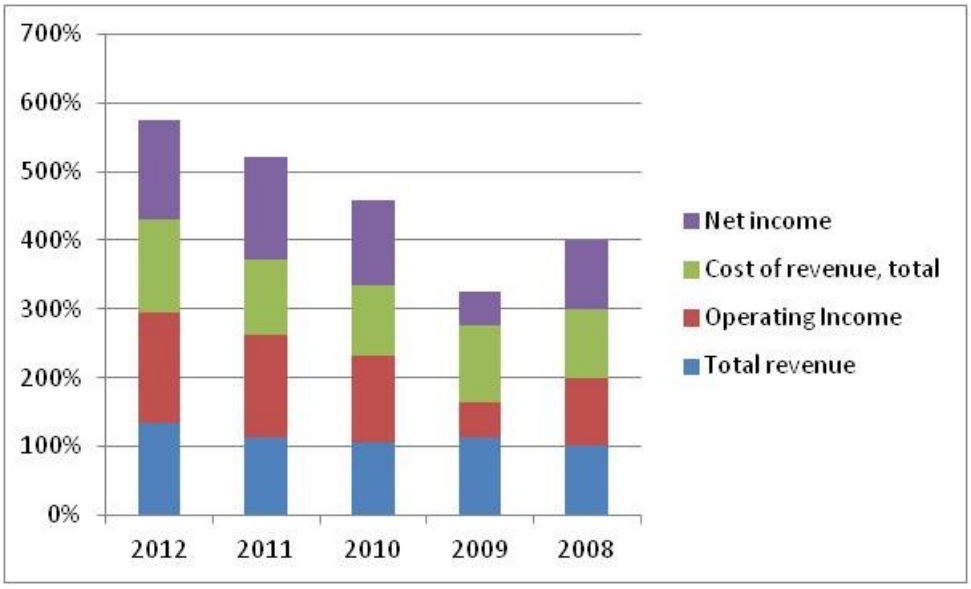
In graph 4.7 the change of short term investments is too great to people ignore the other data. Because of the flexibility of short-term investments, when investors restore the confidence of the market, this kind of investment will in the rapid growth.

Table 4.17 Common-size income statement (2008 as base year)

	2012	2011	2010	2009	2008
Total revenue	134%	113%	106%	112%	100%
Operating Income	160%	148%	126%	53%	100%
Cost of revenue, total	136%	111%	103%	112%	100%
Net income	146%	150%	124%	49%	100%

Essentially all of the data is growing in table 4.12, except the 2009's Operating Income and Net income.

Chart 4.11 Common-size income statements (2008 as base year)



In 2009, the total revenue was rise with the cost of revenue. The result is the net income in 2009 even less than 2008. Fortunately, after that, Boeing began to continue the development.

Even the total revenue is decline; Boeing's net profit still rose slowly.

5 Conclusions

This work is focused on financial analysis, specifically Boeing Company.

Boeing is one of the world's largest civilian airlines, have occupied 90 percent for the civil aircraft market. However, with the rise of Airbus, Boeing lost it a single large position. So it is trying to expand market and development of new products. These measures are effective for the Boeing, though that way Boeing's crisis is also eased in a certain extent.

By analyzing the Boeing Company's financial statements it's not difficult to find that there is a big problem in Boeing, the high fixed costs. The entry barrier for aerospace enterprises is higher than other enterprise, so the high fixed costs are also a common problem of all aircraft manufacturers. High fixed costs mean that capital mobility is not good. It also may lead to a series of debt problems.

The second problem that Boeing needs to pay attention is the Asian market, especially the Chinese market. Compared with Europe and the Americas, the number of developing countries in Asia is bigger. Compared with developed countries 'relatively saturated market, the market demand for Asian countries are significantly greater.

Of course, Boeing still has its unique advantages. First it's Boeing's strong customer base. Airbus showed strong market competitiveness, but Boeing has accumulated a lot of long-term customers, especially in the Americas.

The other advantage is the intangible assets, with years of experience in aircraft manufacturing; Boeing has a good reputation in the world. Such as Airbus, although it is a very good aircraft manufacturer, however, in many people's minds, Boeing is still the best aircraft manufacturer.

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List of Abbreviation

EBIT	Earning before tax
R&D	Research and development
ROA	Return on assets
ROE	Return on equity
EAT	Earning before tax

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Herewith I declare that

- I am informed that Act No. 121/2000 Coll. – the Copyright Act, in particular, Section 35
- Utilization of the Work as a Part of Civil and Religious Ceremonies, as a Part of School Performances and the Utilization of a School Work – and Section 60 – School Work, fully applies to my diploma (bachelor) thesis;
- I take account of the VSB – Technical University of Ostrava (hereinafter as VSB-TUO) having the right to utilize the diploma (bachelor) thesis (under Section 35(3)) unprofitably and for own use ;
- I agree that the diploma (bachelor) thesis shall be archived in the electronic form in VSB-TUO's Central Library and one copy shall be kept by the supervisor of the diploma (bachelor) thesis. I agree that the bibliographic information about the diploma (bachelor) thesis shall be published in VSB-TUO's information system;
- It was agreed that, in case of VSB-TUO's interest, I shall enter into a license agreement with VSB-TUO, granting the authorization to utilize the work in the scope of Section 12(4) of the Copyright Act;
- It was agreed that I may utilize my work, the diploma (bachelor) thesis, or provide a license to utilize it only with the consent of VSB-TUO, which is entitled, in such a case, to claim an adequate contribution from me to cover the cost expended by VSB-TUO for producing the work (up to its real amount).

Ostrava dated 1.May.2013

Jingan Zeng

Jingan Zeng

List of annexes

Anexes1 Balance sheet of Boeing Company from 2008-2012

	Balance Sheet of Boeing form 2009 to 2012				
	Dec 30,2012	Dec 30 2011	Dec 30 2010	Dec 31 2009	Dec 31 2008
Assets					
Current Assets					
Cash and Cash Equivalents	10341000	10049000	5359000	9215000	3268000
Short Term Investments	3217000	1223000	5158000	2008000	11000
Net Receivables	6000000	6298000	5738000	2235900	7073000
Inventory	37751000	32240000	24317000	1693000	15612000
Other Current Assets	0	0	0	0	0
Total Current Assets	5730900	4981000	40572000	35275000	25964000
Long term investment	1180000	1043000	1111000	1030000	1328000
Total-Net	9660000	9313000	8931000	8784000	8762000
Goodwill	5035000	4945000	4937000	4319000	3647000
Intangible assets	3111000	3044000	2979000	2877000	2685000
Other Assets, total	0	0	0	0	0
Note Receivable-Long term	4412000	4652000	4395000	5466000	5857000
Other long term assets, total	8189000	7179000	5640000	4302000	5536000
Total Assets	88896000	78986000	68565000	62053000	53779000

Liabilities					
Current Liabilities					
Accounts Payable	43546000	38921000	34447000	32176000	30213000
Short/current long term debt	1436000	2353000	948000	707000	560000
Other current liabilities	0	0	0	0	0
Total current liabilities	44982000	41274000	35395000	32883000	30773000
Long term debt	8973000	10018000	11473000	12217000	6952000
Other liabilities	28974000	25086000	18835000	14728000	17196000
Deferred long term liability charges	0	0	0	0	0
Minority Interest	10000	93000	96000	97000	152000
Negative Goodwill	0	0	0	0	0
Total Liabilities	83029000	76471000	65799000	59925000	55073000
Equity					
ESOP debt guarantee	0	0	0	-1615000	-1203000
Redeemable preferred stock	0	0	0	0	0
Preferred stock	0	0	0	0	0
Common stock	5061000	5061000	5061000	5061000	5061000
Retained Earnings	30037000	27524000	24784000	22746000	22675000
Treasury Stock-Common	-15937000	-16603000	-17187000	-15911000	-17758000
Capital Surplus	4122000	4033000	3866000	3724000	3456000

Unrealized gain(Loss)	78000	58000	0	0	0
Other Stockholder equity	-17414000	-165580000	-13758000	-11877000	-13525000
Total Equity	5867000	3515000	2766000	2128000	-1294000
Total Equity and Liabilities	88896000	79986000	68565000	62053000	53779000

Annexes2 Income statement of Boeing Company

Income statement	**2012**	**2011**	**2010**	**2009**	**2008**
Revenue	81698	68735	64306	68281	60909
Other revenue total	0	0	0	0	0
Total revenue	81698	68735	64306	68281	60909
Cost of revenue, total	68644	55867	51843	56540	50352
Gross profit	13054	12868	12463	11741	10557
Selling/General/Administrative Expenses, Total	3717	3408	3644	3364	3084
Research & Development	3298	3918	4121	6506	3768
Depreciation/Amortization	0	0	0	0	0
Interest Expense (Income), Net Operating	0	0	0	0	0
Unusual Expense (Income)	-4	-24	-6	24	-4
Other Operating Expenses, Total	0	0	0	0	0
Operating Income	6311	5844	4971	2096	3950
Interest Income (Expense), Net Non-Operating	0	0	0	0	0
Gain (Loss) on Sale of Assets	0	0	0	0	0
Other, Net	62	47	52	-26	247
Income After tax	3903	4011	3311	1335	2654
Minority Interest	0	0	0	0	0
Equity In Affiliates	0	0	0	0	0
U.S. GAAP Adjustment	0	0	0	0	0
Net Income Before Extra. Items	3903	4011	3311	1335	2654
Total Extraordinary Items	-3	7	-4	-23	18
Net income	3900	4018	3307	1312	2672

Annexes3 Cash flow of Boeing Company from 2008-2012

Cash flow					
	2012	2011	2010	2009	2008
Net income	3900	4018	3307	1312	2672
Depreciation	1811	1457	1510	1459	1325
Amortization	0	203	217	207	166
Deferred taxes	0	0	0	0	0
Non-cash items	917	480	952	715	338
Changes in working capital	880	-2135	-3034	1910	-4902
Cash from operating activities	7508	4023	2952	5603	-401
Capital expenditures	-1703	-1703	-1125	-1186	-1674
Other investing cash flow item, total	-2054	4082	-3706	-2608	3562
Cash from investing activities	-3757	2369	-4831	-3794	1888
Financing Cash Flow Items	-259	-439	-148	-56	-392
Total Cash Dividends Paid	-1322	-1244	-1253	-1220	-1192
Issuance of Stock NET	120	114	87	-40	-2893
Issuance of Debt NET	-2016	-131	-648	5410	-725
Cash from financing activities	-3477	-1700	-1962	4094	-5202
Foreign exchange effects	18	-2	-15	44	-59
Net change in cash	292	4690	-3856	5947	-3774